Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID: ssptabf1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
NEWS
     2
                 "Ask CAS" for self-help around the clock
NEWS
         JUL 20
                 Powerful new interactive analysis and visualization software,
                 STN AnaVist, now available
                 STN AnaVist workshops to be held in North America
         AUG 11
NEWS
         AUG 30
                 CA/CAplus -Increased access to 19th century research documents
NEWS
        AUG 30
                 CASREACT - Enhanced with displayable reaction conditions
NEWS
     6
     7
         SEP 09
                 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS
        OCT 03
NEWS
     - 8
                 MATHDI removed from STN
        OCT 04
                 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
NEWS
     9
                 to core patent offices
        OCT 06
                 STN AnaVist workshops to be held in North America
NEWS 10
NEWS 11
         OCT 13
                 New CAS Information Use Policies Effective October 17, 2005
NEWS 12
         OCT 17
                 STN(R) AnaVist(TM), Version 1.01, allows the export/download
                 of CAplus documents for use in third-party analysis and
                 visualization tools
                 Free KWIC format extended in full-text databases
        OCT 27
NEWS 13
        OCT 27
                 DIOGENES content streamlined
NEWS 14
NEWS 15
        OCT 27 EPFULL enhanced with additional content
NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
              General Internet Information
NEWS LOGIN
              Welcome Banner and News Items
              Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
              CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

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FILE 'HOME' ENTERED AT 08:37:21 ON 07 NOV 2005

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:37:32 ON 07 NOV 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5 DICTIONARY FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

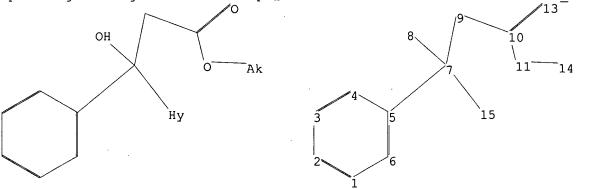
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10506309\FAOM\New Folder\III b.str



chain nodes : 7 8 9 10 11 13 14 15

ring nodes:
1 2 3 4 5 6
chain bonds:
5-7 7-9 7-8 7-15 9-10 10-11 10-13 11-14
ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds:
7-8 7-15 10-11 10-13 11-14
exact bonds:
5-7 7-9 9-10
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems:
containing 1:

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 13:CLASS 14:CLASS 15:Atom

Generic attributes :

15:

Number of Carbon Atoms : less than 7 Type of Ring System : Monocyclic

Element Count : Node 15: Limited N,N1

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 08:38:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 17322 TO ITERATE

11.5% PROCESSED 2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

338560 TO 354320

PROJECTED ANSWERS:

0 TO 0

L2

O SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 08:38:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 343697 TO ITERATE

97.9% PROCESSED 336601 ITERATIONS

34 ANSWERS

0 ANSWERS

100.0% PROCESSED 343697 ITERATIONS

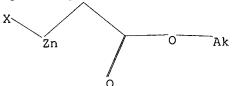
34 ANSWERS

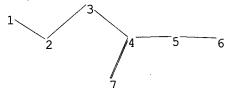
SEARCH TIME: 00.00.22

L3 34 SEA SSS FUL L1

=>

Uploading C:\Program Files\Stnexp\Queries\10506309\FAOM\New Folder\II_b.str





chain nodes:
1 2 3 4 5 6 7
chain bonds:
1-2 2-3 3-4 4-5 4-7 5-6
exact/norm bonds:
4-5 4-7 5-6
exact bonds:

1-2 2-3 3-4

Match level:
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS

L4 STRUCTURE UPLOADED

=> s 14

SAMPLE SEARCH INITIATED 08:38:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 303 TO ITERATE

100.0% PROCESSED 303 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 5016 TO 7104
PROJECTED ANSWERS: 2 TO 124

L5 2 SEA SSS SAM L4

=> s 14 full

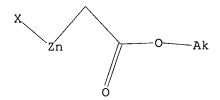
FULL SEARCH INITIATED 08:39:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5743 TO ITERATE

100.0% PROCESSED 5743 ITERATIONS 54 ANSWERS

SEARCH TIME: 00.00.01

L6 54 SEA SSS FUL L4

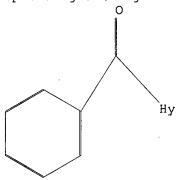
=> d 14 L4 HAS NO ANSWERS

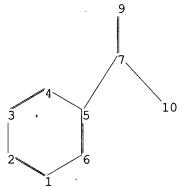


Structure attributes must be viewed using STN Express query preparation.

=>

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chain nodes :
7 9 10
ring nodes :
1 2 3 4 5 6
chain bonds :
5-7 7-9 7-10
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :

7-9 7-10 exact bonds :

5-7 normalized bonds : 1-2 1-6 2-3 3-4 4-5 5-6 isolated ring systems : containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:CLASS 10:Atom

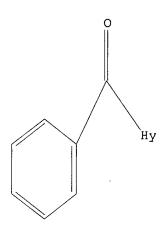
Generic attributes :

Number of Carbon Atoms : less than 7 Type of Ring System : Monocyclic

Element Count : Node 10: Limited N,N1

L7 STRUCTURE UPLOADED

=> d L7 HAS NO ANSWERS L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17SAMPLE SEARCH INITIATED 08:39:31 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 322215 TO ITERATE

0.6% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE** **INCOMPLETE** BATCH

49 ANSWERS

PROJECTED ITERATIONS:
PROJECTED ANSWERS:

6411569 TO 6477031 152559 TO 163211

L8

49 SEA SSS SAM L7

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 323.52 323.73

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FILE COVERS 1907 - 7 Nov 2005 VOL 143 ISS 20 FILE LAST UPDATED: 6 Nov 2005 (20051106/ED)

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http://www.cas.org/infopolicy.html

=> s 13

L9 24 L3

=> s 16

L10 166 L6

=> s 19 and 110

L11 2 L9 AND L10

=> file req

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.90 324.63

.FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 08:40:59 ON 07 NOV 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5 DICTIONARY FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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* The CA roles and document type information have been removed from *

* the IDE default display format and the ED field has been added, *

* effective March 20, 2005. A new display format, IDERL, is now *

* available and contains the CA role and document type information. *

*

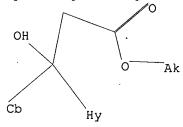
Structure search iteration limits have been increased. See HELP SLIMITS for details.

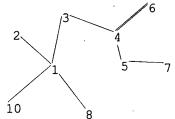
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>

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chain nodes:
1 2 3 4 5 6 7 8 10
chain bonds:
1-8 1-3 1-2 1-10 3-4 4-5 4-6 5-6
exact/norm bonds:
1-8 1-2 4-5 4-6 5-7
exact bonds:
1-3 1-10 3-4

Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 10:Atom Generic attributes:

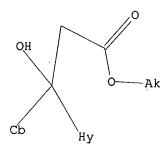
8:

Number of Carbon Atoms : less than 7 Type of Ring System : Monocyclic

Element Count : Node 8: Limited N,N1

L12 STRUCTURE UPLOADED

=> d L12 HAS NO ANSWERS L12 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 112

SAMPLE SEARCH INITIATED 08:41:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 59170 TO ITERATE

3.4% PROCESSED

2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

1168908 TO 1197892

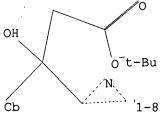
PROJECTED ANSWERS:

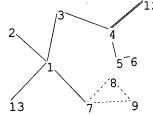
0 TO 0

L13

0 SEA SSS SAM L12

=>





chain nodes :

1 2 3 4 5 6 12 13

ring nodes: 7 8 9

chain bonds :

1-7 1-3 1-2 1-13 3-4 4-5 4-12 5-6

ring bonds:
7-8 7-9 8-9
exact/norm bonds:

1-2 4-5 4-12 7-8 7-9 8-9

exact bonds :

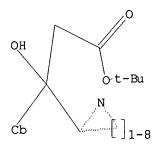
1-7 1-3 1-13 3-4 5-6

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:Atom 8:Atom 9:Atom 12:CLASS 13:Atom

L14 STRUCTURE UPLOADED

L14 HAS NO ANSWERS L14



Structure attributes must be viewed using STN Express query preparation.

SAMPLE SEARCH INITIATED 08:43:08 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 66 TO ITERATE

100.0% PROCESSED 66 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

833 TO 1807 PROJECTED ITERATIONS:

PROJECTED ANSWERS: O TO

0 SEA SSS SAM L14 L15

=> s 114 full

FULL SEARCH INITIATED 08:43:14 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1356 TO ITERATE

100.0% PROCESSED 1356 ITERATIONS 3 ANSWERS

SEARCH TIME: 00.00.01

3 SEA SSS FUL L14

=> file caplus

SINCE FILE COST IN U.S. DOLLARS TOTAL ENTRY SESSION

FULL ESTIMATED COST

162.62 487.25

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=> s 116

L17 2 L16

=> d ibib 1-2

L17 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:719450 CAPLUS

DOCUMENT NUMBER: 139:245905

TITLE: Process for preparation of optically active

β-hydroxy esters

INVENTOR(S): Yamano, Toru; Taya, Naohiro; Ojida, Akio PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA!	TENT	NO.			KIND DATE				APPL	DATE							
WO	WO 2003074487				A1	_	20030912		1	WO 2	 003-		20030305				
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,	PL,
							SE,					TM,	TN,	TR,	TT,	TZ,	UA,
		UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw	,						
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA 2478485					AA	A 20030912			1	CA 2	003-		20030305				
JP 2003327577					A2		2003	1119		JP 2	003-		20030305				

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EP 1489070
                               20041222 EP 2003-708491
                                                                 20030305
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            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 2005107433
                        A1
                               20050519
                                           US 2003-506309
                                                                  20030305
PRIORITY APPLN. INFO.:
                                           JP 2002-60402
                                                              A 20020306
                                           WO 2003-JP2563
                                                               W 20030305
OTHER SOURCE(S):
                        MARPAT 139:245905
REFERENCE COUNT:
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L17 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2002:576071 CAPLUS
DOCUMENT NUMBER:
                        137:262610
TITLE:
                        Highly Enantioselective Reformatskii Reaction of
                        Ketones: Chelation-Assisted Enantioface Discrimination
AUTHOR(S):
                        Ojida, Akio; Yamano, Toru; Taya, Naohiro; Tasaka,
                        Akihiro
CORPORATE SOURCE:
                        Medicinal Chemistry Research Laboratories, Takeda
                        Chemical Industries, Ltd., Osaka, 532-8686, Japan
                        Organic Letters (2002), 4(18), 3051-3054
SOURCE:
                        CODEN: ORLEF7; ISSN: 1523-7060
                        American Chemical Society
PUBLISHER:
DOCUMENT TYPE:
                        Journal
                        English
LANGUAGE:
                        CASREACT 137:262610
OTHER SOURCE(S):
                              THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                        22
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d 111 1-2
L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
ΑN
     2003:719450 CAPLUS
DN
     139:245905
     Process for preparation of optically active \beta-hydroxy esters
TΤ
     Yamano, Toru; Taya, Naohiro; Ojida, Akio
ΤN
     Takeda Chemical Industries, Ltd., Japan
PΑ
     PCT Int. Appl., 40 pp.
SO
     CODEN: PIXXD2
DT
     Patent
    Japanese
T.A
FAN.CNT 1
                                         APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                       ____
                                          _____
                                                                 -----
                               20030912 WO 2003-JP2563
     WO 2003074487
                        A1
                                                                20030305
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
            PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
            KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2478485
                         AΑ
                               20030912
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                                         JP 2003-58506
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                               20031119
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                         Α2
                                        EP 2003-708491
     EP 1489070
                         A1
                               20041222
                                                                 20030305
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
```

11/07/2005 Page 12

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

=> file reg

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 5.75 493.00

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5 DICTIONARY FILE UPDATES: 6 NOV 2005 HIGHEST RN 866821-44-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

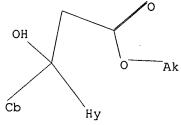
Structure search iteration limits have been increased. See HELP SLIMITS for details.

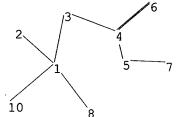
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>

Uploading C:\Program Files\Stnexp\Queries\10506309\FAOM\New Folder\III_b4.str





chain nodes :

1 2 3 4 5 6 7 8 10

chain bonds :

1-8 1-3 1-2 1-10 3-4 4-5 4-6 5-7

exact/norm bonds :

1-8 1-2 4-5 4-6 5-7

exact bonds : 1-3 1-10 3-4

Connectivity:

7:1 M minimum RC ring/chain

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 10:Atom

Generic attributes :

8:

Number of Carbon Atoms : less than 7

Type of Ring System : Monocyclic

Element Count :

Node 8: Limited

N,N1

L18 STRUCTURE UPLOADED

=> s 118

SAMPLE SEARCH INITIATED 08:45:39 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 59170 TO ITERATE

3.4% PROCESSED 2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1168908 TO 1197892

11/07/2005 Page 14

0 ANSWERS

PROJECTED ANSWERS:

0 TO

0

L19

0 SEA SSS SAM L18

=>

---Logging off of STN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY 0.43 SESSION 493.43

STN INTERNATIONAL LOGOFF AT 08:45:58 ON 07 NOV 2005

Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID:ssptabf1626

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
NEWS
                 Web Page URLs for STN Seminar Schedule - N. America
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NEWS
         JUL 20
                 Powerful new interactive analysis and visualization software,
                 STN AnaVist, now available
         AUG 11
                 STN AnaVist workshops to be held in North America
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         AUG 30
                 CA/CAplus -Increased access to 19th century research documents
NEWS
NEWS
        AUG 30
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         SEP 09
                 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS
         OCT 03
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NEWS
         OCT 04
                 CA/CAplus-Canadian Intellectual Property Office (CIPO) added
NEWS
                 to core patent offices
NEWS 10
         OCT 06
                 STN AnaVist workshops to be held in North America
NEWS 11
         OCT 13
                 New CAS Information Use Policies Effective October 17, 2005
                 STN(R) AnaVist(TM), Version 1.01, allows the export/download
NEWS 12
         OCT 17
                 of CAplus documents for use in third-party analysis and
                 visualization tools
        OCT 27
                 Free KWIC format extended in full-text databases
NEWS 13
NEWS 14
        OCT 27
                 DIOGENES content streamlined
                 EPFULL enhanced with additional content
NEWS 15
        OCT 27
              JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT
NEWS EXPRESS
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005
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NEWS PHONE
NEWS WWW
              CAS World Wide Web Site (general information)
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=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:09:31 ON 07 NOV 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

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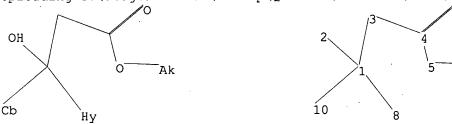
************ The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, effective March 20, 2005. A new display format, IDERL, is now available and contains the CA role and document type information. ***********

Structure search iteration limits have been increased. See HELP SLIMITS for details.

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http://www.cas.org/ONLINE/UG/regprops.html

=> Uploading C:\Program Files\Stnexp\Queries\10506309\FAOM\New Folder\form III d.str



chain nodes : 1 2 3 4 6 7 chain bonds : 1-8 1-3 1-2 1-10

3-4 4-5 4-6 5-7 exact/norm bonds :

4-6 5-7 1-2 4-5 exact bonds :

1-3 1-10 3-4

Connectivity:

7:1 M minimum RC ring/chain

Match level:

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 10:Atom

Generic attributes :

8:

Saturation : Unsaturated Number of Carbon Atoms : less than 7 Type of Ring System : Monocyclic

10:

Saturation : Unsaturated

Element Count :
Node 8: Limited

N,N1

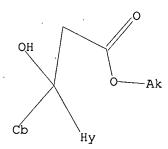
L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1

STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 11:09:49 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 59170 TO ITERATE

3.4% PROCESSED 2000 ITERATIONS

0 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 1168908 TO 1197892 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

Uploading C:\Program Files\Stnexp\Queries\10506309\FAOM\New Folder\form III_d2.str 16 .2 OH Ak 10 Ġ1 Hy

```
chain nodes :
1 2 3 4 5 6 7 8
ring nodes :
          15 16 17 18 19 20 21 22 23 24 25
12 13 14
chain bonds :
1-8 1-3 1-2 1-10 3-4 4-5 4-6
                                5-7
ring bonds :
                  14-15 15-16 16-17 18-19 18-23 19-20 20-21 21-22 22-23
12-13 12-17
            13-14
22-24 23-27 24-25
                  25-26 26-27
exact/norm bonds:
1-8 1-2 1-10 4-5
                  4-6 5-7
exact bonds :
1-3 3-4
normalized bonds :
                         15-16 16-17 18-19 18-23 19-20 20-21 21-22 22-23
12-13 12-17 13-14
                   14-15
22-24 23-27 24-25
                  25-26 26-27
```

```
G1:[*1],[*2]
Connectivity:
7:1 M minimum RC ring/chain
Match level :
1:CLASS 2:CLASS
                3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:Atom 10:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:Atom 18:Atom 19:Atom 20:Atom
21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom
Generic attributes :
8:
                     : Unsaturated
Number of Carbon Atoms : less than 7
Type of Ring System
                     : Monocyclic
```

Element Count : Node 8: Limited N,N1

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3

STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s 13SAMPLE SEARCH INITIATED 11:12:20 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19337 TO ITERATE

10.3% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

> **COMPLETE** BATCH

PROJECTED ITERATIONS:

PROJECTED ANSWERS:

395064 378416 TO 7 TO 379

1 SEA SSS SAM L3 T.4

=> s 13 full

FULL SEARCH INITIATED 11:12:28 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 384096 TO ITERATE

373235 ITERATIONS 97.2% PROCESSED

39 ANSWERS

39 ANSWERS

1 ANSWERS

100.0% PROCESSED 384096 ITERATIONS

SEARCH TIME: 00.00.27

L5 39 SEA SSS FUL L3

=> file caplus

·COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

163.48 163.69

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=> s 15 L6 25 L5

=> file reg COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.45 164.14

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Please note that search-term pricing does apply when conducting SmartSELECT searches.

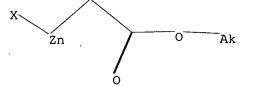
Structure search iteration limits have been increased. See HELP SLIMITS for details.

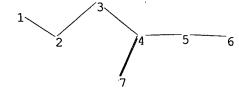
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>

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chain nodes : 1 2 3 4 5 6

chain bonds :

1-2 2-3 3-4 4-5 4-7 5-6

exact/norm bonds:
4-5 4-7 5-6
exact bonds:
1-2 2-3 3-4

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS

L7 STRUCTURE UPLOADED

=> s 17 full

FULL SEARCH INITIATED 11:13:31 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 5743 TO ITERATE

100.0% PROCESSED 5743 ITERATIONS

54 ANSWERS

SEARCH TIME: 00.00.01

L8 54 SEA SSS FUL L7

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
161.33
325.47

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=> s 18

L9 166 L8

=> s 19 and 16

L10 3 L9 AND L6

=> d ibib abs hitstr 1-3

L10 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:719450 CAPLUS

DOCUMENT NUMBER: 139:245905

TITLE: Process for preparation of optically active

β-hydroxy esters

INVENTOR(S): Yamano, Toru; Taya, Naohiro; Ojida, Akio PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA'	rent :	NO.			KIN	D	DATE		APPLICATION NO.									
	WO	WO 2003074487					A1 20030			2 WO 2003-JP2563					20030305				
		W:	AE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
			ĹΤ,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
			PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
			UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw								
		RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,	
			KG,	ΚZ,	MD,	RU,	ТJ,	ΤM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
	CA	AA		2003	0912		CA 2	003-	2478	20030305									
	JP	2003	3275	77		A2 20031119					JP 2	003-	5850	20030305					
	EP	1489	070			A1 20041222				•	EP 2	003-	7084	20030305					
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	·IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR,	BG,	CZ,	EE,	HU,	SK		
	US 2005107433							2005	0519	US 2003-506309					20030305				
PRIORITY APPLN. INFO.:										JP 2002-60402					1	A 20020306			
								WO 2003-JP2563					W 20030305						
	OTHER CA	STIDOR		MADE	שמס	120.	2150	Λ E											

OTHER SOURCE(S): MARPAT 139:245905

AB This invention pertains to a method for producing optically active β-hydroxy esters represented by the general formula of HO-C(R1R2)-C(R4R5)-CO2R3 [wherein R1 = H, (un)substituted hydrocarbyl, or heterocyclyl; R2 = (un)substituted heterocyclyl; R3 = (un)substituted hydrocarbyl or heterocyclyl; R4 and R5 = independently H, halo, (un)substituted silyl, hydrocarbyl, or heterocyclyl], characterized by reacting R1COR2 with X-Zn-C(R4R5)-CO2R3 [where X= halo] in the presence of a cinchona alkaloid. For example, 2-benzoylpyridine was reacted with a Reformatskii reagent in THF in the presence of cinchonine and pyridine to give 3-hydroxy-3-phenyl-3-(pyridin-2-yl)propionic acid tert-Bu ester (98%)

with 90% e.e. This invention provides a method to make optically active β -hydroxy esters in high yield with high e.e.

IT 51656-70-3

RL: RCT (Reactant); RACT (Reactant or reagent)
 (Reformatskii reagent; preparation of optically active hydroxy esters using
Reformatskii reagent)

RN 51656-70-3 CAPLUS

CN Zinc, bromo[2-(1,1-dimethylethoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME)

IT 596806-39-2P 596806-40-5P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (optically active; preparation of optically active hydroxy esters using
 Reformatskii reagent)

RN 596806-39-2 CAPLUS

CN 2-Pyridinepropanoic acid, β -hydroxy- β -phenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 596806-40-5 CAPLUS

CN 2-Pyridinepropanoic acid, β -(4-chlorophenyl)- β -hydroxy-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:570964 CAPLUS

DOCUMENT NUMBER:

139:133566

TITLE:

Process for producing fused imidazole compound,

Reformatskii reagent in stable form, and process for

producing the same

INVENTOR(S):

Kawakami, Jun-ichi; Nakamoto, Koji; Nuwa, Shigeru;

Handa, Syoji; Miki, Shokyo

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. _____ ----_____ -----20030724 WO 2003-JP300092 20030109 WO 2003059889 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2472821 AA 20030724 CA 2003-2472821 20030109 JP 2004161726 A2 20040610 JP 2003-3231 EP 2003-700504 20030109 EP 1471056 A1 20041027 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK US 2004-500999 US 2005043544 A1 20050224 PRIORITY APPLN. INFO.: JP 2002-3821 A 20020925 W 20030109 JP 2002-279438 WO 2003-JP92

OTHER SOURCE(S): MARPAT 139:133566

GT

Disclosed are a process for industrially advantageously producing a AΒ

53429-23-5 CAPLUS

RN

CN

formula [I; Ra = H, a substituent; Ar = (un)substituted aromatic hydrocarbyl; Y1, Y2 = H, a substituent; the ring B = (un) substituted N-containing ring; n =an integer of 1-3] and a Reformatskii reagent in a stable form which is suitable for use in the production process. Either a specific β -hydroxy ester compound derivative (II; R = an ester residue; Ra, Ar, the ring B, Y1, Y2, n = same as above) obtained from a specific carbonyl compound by the Reformatskii reaction or a salt of the compound is reduced in the presence of a metal/hydrogen complex compound and a metal halide to an alc. (III; Ra, Ar, the ring B, Y1, Y2, n = same as above) and then subjected to ring closure to thereby obtain a compound represented by the general formula I. In the Reformatskii reaction, a stable solution of the compound represented by BrZnCH2CO2C2H5 or crystals of the compound represented by (BrZnCH2CO2Et.THF)2 are useful. Thus, 10 L THF and 253 mL chlorotrimethylsilane were successively added to 2,616 g Zn powder, stirred at 25° for 30 min, treated dropwise with a solution of 2,212mL Et bromoacetate in 25 l THF, and stirred at 31-35° for 30 min to qive a Reformatskii reagent solution which was treated with 21.2 q (+)-cinchonine at $0-5^{\circ}$ and then dropwise with 18.6 mL pyridine at 0-5° over 7 min, stirred at 0-5° for 20 min, treated dropwise with a solution of 30 g N-methyl-6-[(1-trityl-1H-imidazol-4yl)carbonyl]-2-naphthamide in 300 mL THF over 30 min at -42° to -40°, and stirred at -45° to -40° for 1 h to give, after workup, 29.2 g Et (3S)-3-hydroxy-3-[6-[(methylamino)carbonyl]-2naphthyl]-3-(1-trityl-1H-imidazol-4-yl)propanoate (IV) (83% yield, 93.5% ee). THF (13 mL) and 0.645 g NaBH4 were successively added to 1.3 g IV and the resulting mixture was treated with 0.95 g CaCl2 at 2° and then dropwise with 13 mL ethanol over 15 min at 2° , stirred at 3-4° for 30 min and at 40-43° for 4 h to give, after workup, 1.08 q = 6 - [(1S) - 1, 3 - dihydroxy - 1 - (1 - trityl - 1H - imidazol - 4 - yl)propyl] - N - methyl -2-naphthamide (V) (89% yield, 92.0% ee). THF (7 mL) and 0.42 mL diisopropylethylamine were successively added to 0.35 g V and the resulting mixture was treated dropwise with 0.07 mL methanesulfonyl chloride at 0-5°, stirred at 0-5° for 40 min, treated with 1.8 mL MeOH and 3.5ml MeCN, and stirred at $60-65^{\circ}$ for 4 h to give, after workup, 0.87 g 6-[(7S)-7-hydroxy-6,7-dihydro-5H-pyrrolo[1,2-c]imidazol-7yl]-N-methyl-2-naphthamide (VI) (62%, 98.2% ee). 53429-22-4P, Methoxycarbonylmethylzinc bromide 53429-23-5P , Isopropoxycarbonylmethylzinc bromi'de RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (THF solution; preparation of fused imidazole compound steroid lyase inhibitor by Reformatskii reaction using stable alkoxycarbonylmethylzinc bromide, reduction of β -hydroxy esters, and cyclization) RN53429-22-4 CAPLUS Zinc, bromo(2-methoxy-2-oxoethyl)- (9CI) (CA INDEX NAME) CN MeO-C-CH2-Zn-Br

steroid C17,20-lyase inhibitor represented by the following general

11/07/2005 Page 11

Zinc, bromo[2-(1-methylethoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
i-PrO-C-CH2-Zn-Br
     51656-70-3P, tert-Butoxycarbonylmethylzinc bromide
ΙT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (THF solution; preparation of stable ethoxycarbonylmethylzinc bromide-THF
        complex or alkoxycarbonylmethyl zinc bromide solution for Reformatskii
        reaction of carbonyl compds.)
RN
     51656-70-3 CAPLUS
CN
     Zinc, bromo[2-(1,1-dimethylethoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME)
t-BuO-C-CH2-Zn-Br
ΙT
     5764-82-9P, Ethoxycarbonylmethylzinc bromide
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (organic solvent solution; preparation of fused imidazole compound steroid
lyase
        inhibitor by Reformatskii reaction using stable
        alkoxycarbonylmethylzinc bromide, reduction of \beta-hydroxy esters, and
        cyclization)
RN
     5764-82-9 CAPLUS
     Zinc, bromo(2-ethoxy-2-oxoethyl)- (9CI) (CA INDEX NAME)
CN
EtO-C-CH2-Zn-Br
     566200-78-0P, Ethyl (3S)-3-hydroxy-3-[6-[(methylamino)carbonyl]-2-
     naphthyl]-3-(1-trityl-1H-imidazol-4-yl)propanoate 566200-80-4P,
     Isopropyl (3S)-3-hydroxy-3-[6-[(methylamino)carbonyl]-2-naphthyl]-3-(1-
     trityl-1H-imidazol-4-yl)propanoate 566200-92-8P
     566200-93-9P 566200-97-3P, Ethyl 3-hydroxy-3-[6-
     [(methylamino)carbonyl]-2-naphthyl]-3-(1-trityl-1H-imidazol-4-
     yl)propanoate 566200-98-4P, tert-Butyl (3S)-3-hydroxy-3-[6-
     [(methylamino)carbonyl]-2-naphthyl]-3-(1-trityl-1H-imidazol-4-
     yl)propanoate
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of fused imidazole compound steroid lyase inhibitor by
        Reformatskii reaction using stable alkoxy.carbonylmethylzinc bromide,
        reduction of \beta-hydroxy esters, and cyclization)
RN
     566200-78-0 CAPLUS
CN
     1H-Imidazole-4-propanoic acid, β-hydroxy-β-[6-
     [(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, ethyl ester,
     (\beta S) - (9CI) (CA INDEX NAME)
```

RN 566200-80-4 CAPLUS

CN $1H-Imidazole-4-propanoic acid, \beta-hydroxy-\beta-[6-[(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, 1-methylethyl ester, (<math>\beta$ S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 566200-92-8 CAPLUS

CN 1H-Imidazole-4-propanoic acid, β -hydroxy- β -[6-[(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, methyl ester, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 566200-93-9 CAPLUS

CN 1H-Imidazole-4-propanoic acid, β -hydroxy- β -[6-[(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, propyl

ester, (βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 566200-97-3 CAPLUS

CN 1H-Imidazole-4-propanoic acid, β -hydroxy- β -[6-[(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)

RN 566200-98-4 CAPLUS

CN lH-Imidazole-4-propanoic acid, β -hydroxy- β -[6- [(methylamino)carbonyl]-2-naphthalenyl]-1-(triphenylmethyl)-, 1,1-dimethylethyl ester, (β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 426219-55-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of fused imidazole compound steroid lyase inhibitor by

Reformatskii reaction using stable alkoxycarbonylmethylzinc bromide, reduction of β -hydroxy esters, and cyclization)

RN 426219-55-8 CAPLUS

CN 1H-Imidazole-4-propanoic acid, β -[6-[[bis(1-

methylethyl) amino|carbonyl|-2-naphthalenyl|- β -hydroxy-1-(triphenylmethyl) -, ethyl ester (9CI) (CA INDEX NAME)

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 5 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ACCESSION NUMBER:

2002:576071 CAPLUS

DOCUMENT NUMBER:

137:262610

TITLE:

Highly Enantioselective Reformatskii Reaction of

Ketones: Chelation-Assisted Enantioface Discrimination

AUTHOR(S):

Ojida, Akio; Yamano, Toru; Taya, Naohiro; Tasaka,

Akihiro

CORPORATE SOURCE:

Medicinal Chemistry Research Laboratories, Takeda Chemical Industries, Ltd., Osaka, 532-8686, Japan

SOURCE:

Organic Letters (2002), 4(18), 3051-3054

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 137:262610

Highly enantioselective Reformatskii reaction of ketones was accomplished AB using cinchona alkaloids as chiral ligands. Chelation with the sp2-nitrogen adjacent to the reactive carbonyl center contributed to the enantioface discrimination for the high enantioselectivities.

ΙT 51656-70-3

> RL: RCT (Reactant); RACT (Reactant or reagent) (chelation-assisted enantioface discrimination in asym. Reformatskii reactions)

51656-70-3 CAPLUS RN

Zinc, bromo[2-(1,1-dimethylethoxy)-2-oxoethyl]- (9CI) (CA INDEX NAME) CN

IT 463304-61-2P 463304-66-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(chelation-assisted enantioface discrimination in asym. Reformatskii reactions)

463304-61-2 CAPLUS RN

1H-Imidazole-4-propanoic acid, β -hydroxy- β -2-naphthalenyl-1-CN (triphenylmethyl)-, 1,1-dimethylethyl ester, (βS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

463304-66-7 CAPLUS RN

CN 2-Pyridinepropanoic acid, β -hydroxy- β -phenyl-, 1,1-dimethylethyl ester, (βS) - (9CI)(CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 463304-64-5P 463304-67-8P 463304-68-9P

805247-65-8P

RL: SPN (Synthetic preparation); PREP (Preparation) (chelation-assisted enantioface discrimination in asym. Reformatskii reactions)

RN 463304-64-5 CAPLUS

1H-Imidazole-4-propanoic acid, β -hydroxy- β -phenyl-1-CN (triphenylmethyl)-, 1,1-dimethylethyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 463304-67-8 CAPLUS

3-Pyridinepropanoic acid, β -hydroxy- β -phenyl-, 1,1-dimethylethyl CN ester (9CI) (CA INDEX NAME)

RN 463304-68-9 CAPLUS

CN 4-Pyridinepropanoic acid, β -hydroxy- β -phenyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 805247-65-8 CAPLUS

CN 1H-Imidazole-4-propanoic acid, β -hydroxy- β -2-naphthalenyl-1- (triphenylmethyl)-, 1,1-dimethylethyl ester, (β R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

---Logging off of STN---

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Executing the logoff script...

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